Q-251R4

SVE BULLETIN

SPECIAL VEHICLE ENGINEERING – BODY BUILDERS ADVISORY SERVICE

E-Mail via Website: www.FordBBAS.com (click "Contact Us")

Toll-free: (877) 840-4338

QVM BULLETIN: Q-251R4 DATE: 06/ FEB / 2024

FORD VEHICLE INTEGRATION SYSTEM 1.0

REVISION	UPDATE	REVISION DATE
Q-251R4	Change Naming Nomenclature	06/FEB/2024
Q-251R3	REVISED DOCUMENTATION INSTRUCTIONS (SUPERCEDED BY BULLETIN Q-344)	01MAR2022
Q-251R2	ADDED MODEL YEAR CUTOFF	5JUN2020
Q-251R1	REMOVED EMAIL INFORMATION.	12AUG2016
Q-251	INITIAL RELEASE	08AUG2016

MODEL(S) AFFECTED:
All 2017 through 2022 models available with the option Vehicle Integration System 1.0

NOTE: THIS BULLETIN IS SUPERCEDED BY BULLETIN Q-344. REFERENCE BULLETIN Q-344R1 FOR THE LATEST GUIDANCE.

ISSUE / DESCRIPTION:

Purpose:
To describe the optional Vehicle Integration System 1.0, hardware, software, and user's guides.

Vehicle Integration System 1.0 Overview:
The Vehicle Integration System 1.0 is an electronic control module that provides output signals for aftermarket equipment (such as lift buckets, cranes, motors, salt spreaders, snowplows, etc.) via customer programmable logic based on switch inputs and vehicle CAN bus messages. The operation of such equipment is limited to the load parameters of the Vehicle Integration System 1.0. The Vehicle Integration System 1.0 does not come pre-programed for use. It must be configured by the Upfitter for aftermarket equipment.

The Vehicle Integration System 1.0 is configured using the Project Editor. The user must obtain the Project Editor installation package by requesting the files from a Ford dealer (see SVE bulletin Q-344) Microsoft Word - Q-344 Accessing Vehicle Integration System 1.0 Documentation and Project editor software - Copy (marketingassociates.com) (The Project Editor allows the user to program the application logic for each Vehicle Integration System 1.0 output based on inputs and CAN signals. A standard Type B Universal Serial Bus (USB) 2.0 cable is required (not included) to connect the user's PC to the Vehicle Integration System 1.0, to download the application logic. The upfitter created application may be loaded to Vehicle Integration System 1.0 when it is mounted in vehicle, or the module can be removed and software bench loaded.

In order to successfully create and implement an Upfitter application, these other documents and material may be required:

- The Vehicle Integration System 1.0 (pre-installed in the vehicle when ordered or may be purchased separately.) Replacement modules are available through the dealership.

-The Vehicle Integration System 1.0 Read Me first
(https://www.lom.ford.com/launchomatic/launch/view.jsp?chronicleId=0900cad982b42889&docbase=edmsna1)

-Vehicle Integration System 1.0 project examples file
(https://www.lom.ford.com/launchomatic/launch/view.jsp?chronicleId=0900cad982b42b3a&docbase=edmsna1)
- VEHICLE INTEGRATION SYSTEM 1.0 Project Editor User Manual

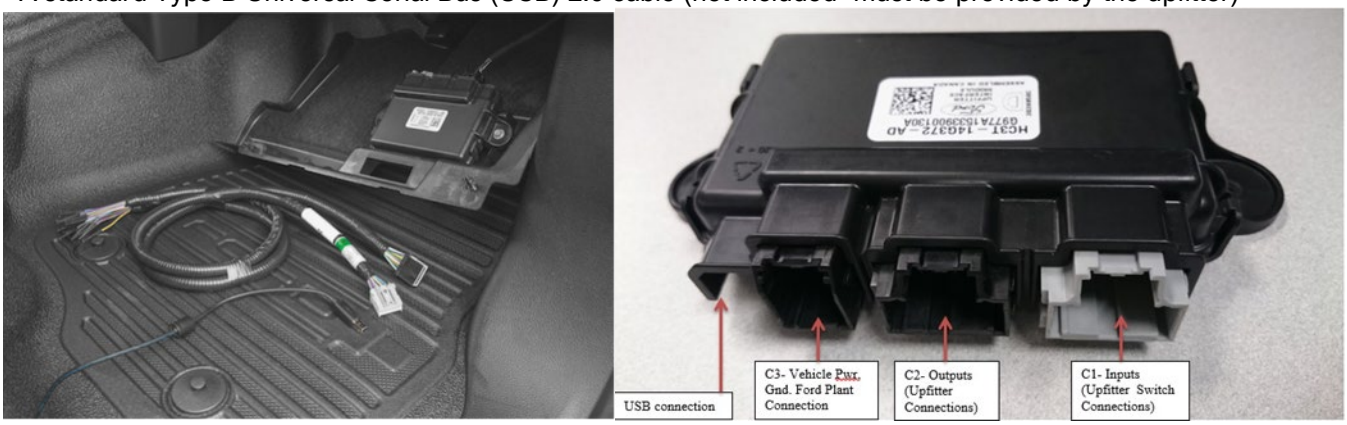
(https://www.lom.ford.com/launchomatic/launch/view.jsp?chronicleId=0900cad982b42887&docbase=edmsna1)

- Vehicle Integration System 1.0 Owner's Manual
(https://www.lom.ford.com/launchomatic/launch/view.jsp?chronicleId=0900cad982b42888&docbase=edmsna1)

- Windows based VEHICLE INTEGRATION SYSTEM 1.0 Project Editor software
(see Downloading Software) (http://www.fleet.ford.com/login/)

- The Vehicle Integration System 1.0 16-way harnesses 9 (two blunt cut 3' harnesses with connectors). Replacement harnesses are available through the dealership.

- A standard Type B Universal Serial Bus (USB) 2.0 cable (not included- must be provided by the upfitter)


USB connection
C3- Vehicle Pwr, Gnd. Ford Plant Connection
C2- Outputs (Upfitter Connections)
C1- Inputs (Upfitter Switch Connections)

Left: Vehicle Integration System 1.0 as mounted in the 2017MY Super Duty, and interface cables (included) and USB cable (Not included)
Right: Vehicle Integration System 1.0 connectors

Downloading Software from the Ford Fleet website:
The Windows based Vehicle Integration System 1.0 project editor software is available through the Ford Fleet website (http://www.fleet.ford.com/login/). Existing Ford Fleet website users may use their current login. New users should follow the instructions listed on "creating an account" via the link provided. If you have questions or need further assistance with the Ford Fleet Website, contact the Ford Fleet Customer Information Center at:

1-800-34-FLEET (1-800-343-5338).
Monday-Friday 8:30 AM-5 PM EST
Or
Contact Ford Fleet via email (**http://www.fleet.ford.com/contact-us/customer-information-center/email-us/**)

Note: Ford Motor Company is not responsible for debugging or verifying the function of the customer created Vehicle Integration System 1.0 program files**.** It is the responsibility of the upfitter to ensure proper function of the software created to complete their upfit.

Vehicle Integration System 1.0 Signals:
The Vehicle Integration System 1.0 receives 28 high speed CAN "read only" signals from various vehicle systems, providing upfitter access for aftermarket equipment needs. In addition, the upfitter may provide up to 9 additional inputs. These messages and inputs may be selected by the upfitter in the Project Editor to program the Vehicle Integration System 1.0 outputs for aftermarket equipment. Note that the Vehicle Integration System 1.0 has no interaction with vehicle feature functions (with the exception of horn chirp). It is strictly designed to provide outputs for aftermarket equipment.

The Vehicle Integration System 1.0 provides the following:
- 9 configurable inputs (active low or active high), (blunt cut pigtail connector*)
- 7 Low side driver output pins (blunt cut pigtail connector*)
- 8 High side driver output pins (blunt cut pigtail connector*)
- 25-30 HSCAN signals (descriptive names in the Project Editor)
- *Pigtails with 3 foot jumpers are provided for I/O's to connect to aftermarket devices.

Note: The Vehicle Integration System 1.0 provides output signals only, and not intended to directly power any aftermarket device. Customer must use external relays to drive any equipment.

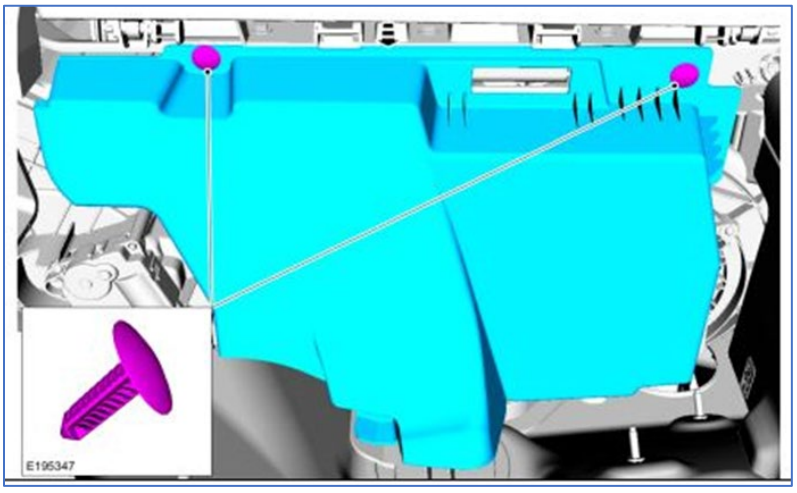
The following are some of the high-speed CAN messages available into the Vehicle Integration System 1.0. See the Vehicle Integration System 1.0 Project Editor's manual for more information.

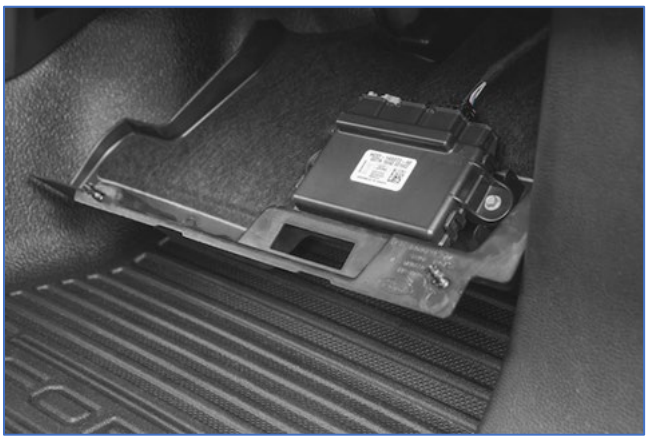
Message		Message
Engine Coolant Temp		Rear Left Door Status
Engine Status		Rear Right Door Status
Outside Air Temp		Driver Door Status
A/C Compressor Clutch Status		Hood Status
Cruise Control Mode Status		Tire Pressure Monitoring System Status
Vehicle Speed		Air Conditioning (A/C) Request
Engine Speed (RPM)		Driver Seat Buckle Status
Transmission Oil Temp		Passenger Seat Buckle Status
Automatic Transmission Gear Status		Restraints Indicator Lamp (RIL) Status
Door Lock Status		Crash Event Severity
Ignition Status		Oil Pressure Lamp Status
Crash Event Status		Malfunction Indicator Lamp (MIL) Status
Passenger Door Status		Vehicle Battery Voltage
Odometer Reading		Fuel Level

2017 MY Super Duty Vehicle Integration System 1.0 location:

The Vehicle Integration System 1.0 will be available as an orderable option (order code 18A) on the 2017 MY Super Duty. The module is located in the interior of the vehicle on the passenger side behind and below the Lower the glove compartment. To access the Vehicle Integration System 1.0:

1. Release the retainers and remove the insulation panel.





Refer to the Body Builder Layout Book for additional guidelines and recommendations. If you have any questions, please contact the Ford Body Builders Advisory Service as shown in the header of this bulletin.